AMENDMENTS TO CLAIMS

1.   (currently amended) A surgical microscope system for positioning a variable focus surgical microscope over a dental chair, said dental chair of the type having a hinge for rotating the patient position, said hinge located near the patient's hips and adapted to rotate about said hinge, said dental chair of the type having a range of vertical motion, said system comprising:

a substantially vertical microscope support arm adapted for fitment on said dental chair, and thereby adapted for vertical motion in concert with chair vertical motion;

an articulated horizontally movable microscope positioning arm having a ~~plurality of~~ four or more hinged links, each link having a vertical axis for restricting arm motion solely to a horizontal plane, said microscope positioning arm connected to said vertical support arm with a clamp, said clamp allowing adjustable vertical orientation and vertical motion along the length of said vertical support arm[[,]];

a terminal link with a repositionable axis of rotation orthogonal to said substantially vertical support arm proximate said variable focus microscope, whereby said terminal link permits said variable focus microscope to be inclined at any of several discreet pre-selected angles with respect to said substantially vertical support arm;

a microscope coupler for connecting said variable focus microscope to said ~~positioning arm at a fixed relative location between said variable focus microscope and said positioning arm~~ terminal link, the microscope rotationally attached to the coupler along an axis that is perpendicular to the length of the terminal link and that lies within a plane which is perpendicular to the ground;

a foot control whereby the dental chair can be raised or lowered; and

a hand control whereby the patient position can be rotated about said hinge; whereby the microscope system is supported for vertical motion and location by said substantially vertical support arm and said positioning arm.

2. (canceled)

3. (canceled)